

Maine Weekly Influenza Surveillance Report

March 11, 2009

Synopsis

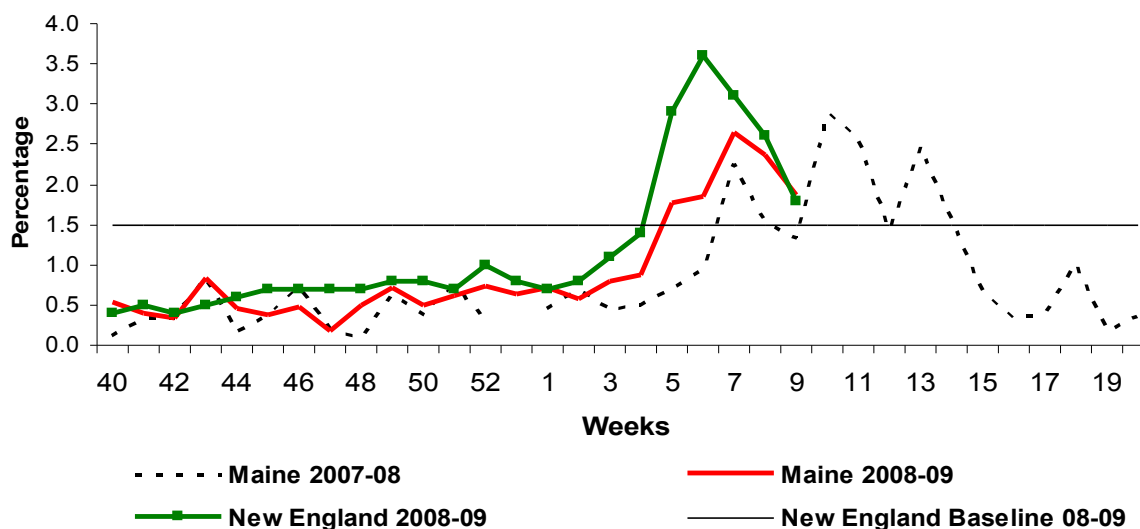
During the week ending March 7th, 2009 (MMWR week 9)*, Maine reported regional influenza activity. Both lab confirmed influenza, and influenza detected by rapid testing decreased this week. To date, 37 positive influenza A samples have been subtyped by the Maine Health and Environmental Testing Laboratory (HETL): 35 were A H1, and two were A H3. Maine is still experiencing a dominantly influenza A, H1 season. There were four new outbreaks of influenza-like illness reported during week 9, all in long term care facilities. Outpatient influenza-like illness visits decreased again this week, as did emergency visits detected through syndromic surveillance.

Moderate Disease Surveillance

Outpatient influenza-like illness (ILI)

During the week ending March 7th, 2009, 1.9% of outpatient visits reported by eight Maine Sentinel Providers were for influenza-like illness (ILI). ILI is defined as fever ($\geq 100^{\circ}\text{F}$ / $\geq 37.8^{\circ}\text{C}$) AND cough or sore throat in the absence of a known cause. In the New England States, 1.8% of outpatient visits were attributed to influenza-like illness during week 9. ILI is decreasing both in Maine and in the New England states.

Outpatient Visits for Influenza-like Illness – Maine, 2007-09



New England is defined as Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont.

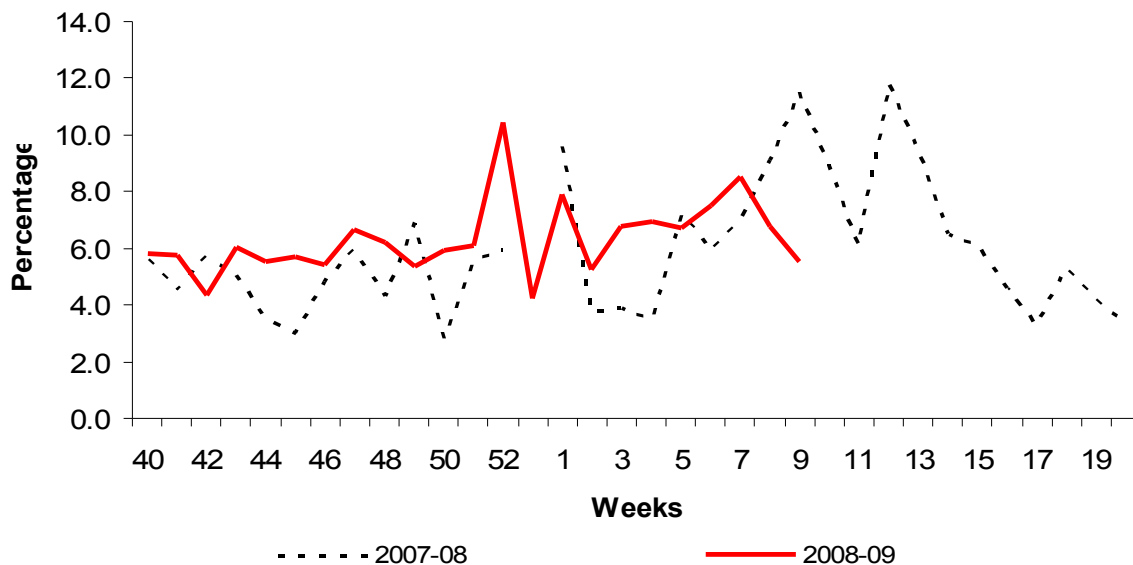
* At time of publication, reporting may be incomplete. Numbers presented here may change as more reports are received.

Severe Disease Surveillance

Hospital inpatients

During the week ending March 7th, 2009, 5.5% of hospital admissions reported by three hospitals were attributable to pneumonia or influenza.

Hospital Admissions Due to Pneumonia or Influenza -- Maine, 2007-09

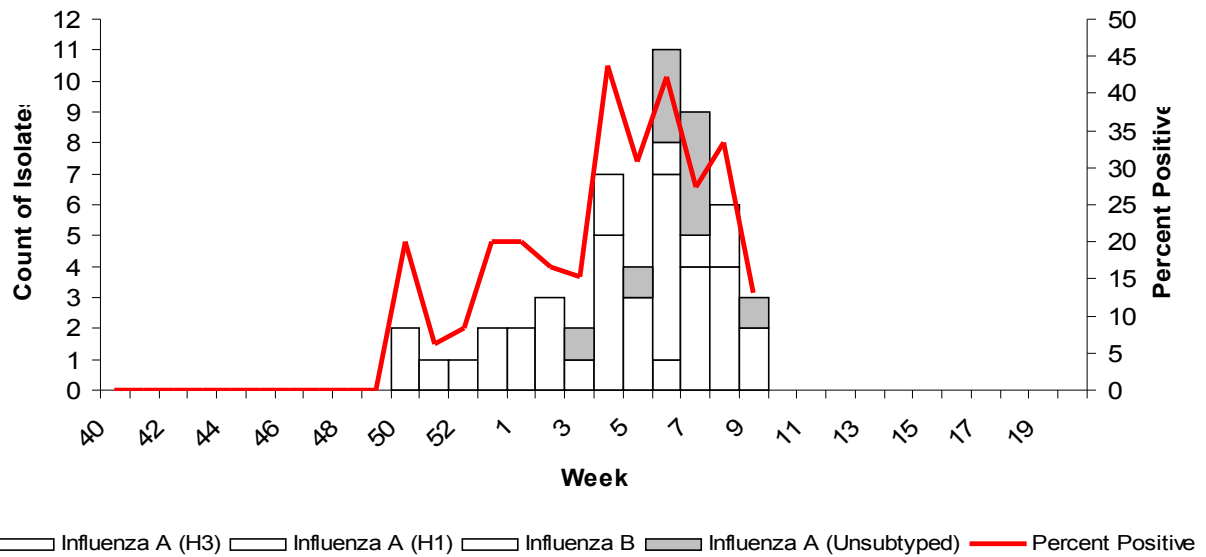


Laboratory Reporting

During the week ending March 7th, 2009, 23 samples were submitted for testing to the Maine Health and Environmental Testing Laboratory (HETL). Three (13.0%) tested positive for influenza. Two were positive for influenza A H1, and one was positive for influenza A unsubtype.

To date, 257 samples have been submitted, 53 (20.6%) were positive for influenza: 35 for influenza A H1, two for influenza A H3, ten for influenza A unsubtype, and six for influenza B. The influenza B strains will be forwarded to the federal CDC for lineage typing, and results are pending.

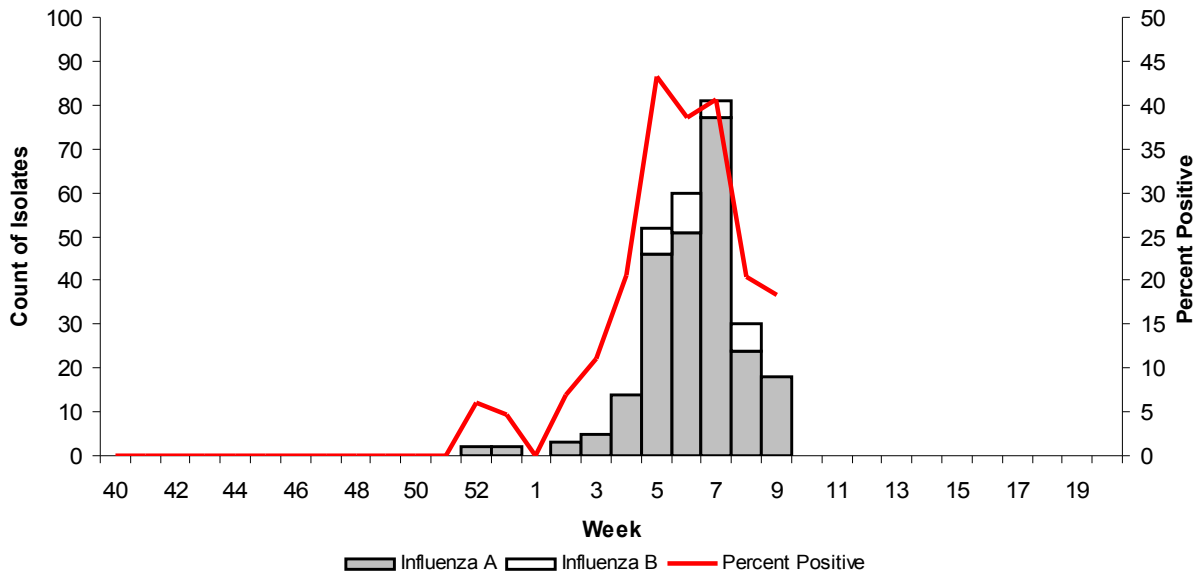
Respiratory Specimens Positive for Influenza from HETL, Maine, 2008-2009



During the week ending March 7th, 2009, 98 samples were submitted for testing to two private reference laboratories, 18 tested positive for influenza A. Twenty one samples were positive for RSV.

A combined total of 1,321 specimens have been submitted since September 28, 2009 for respiratory testing to two private labs. To date, 242 samples were positive for influenza A, 25 samples were positive for influenza B, 139 samples were positive for RSV, ten samples were positive for parainfluenza 3, four samples were positive for adenovirus, and two samples were positive for enterovirus.

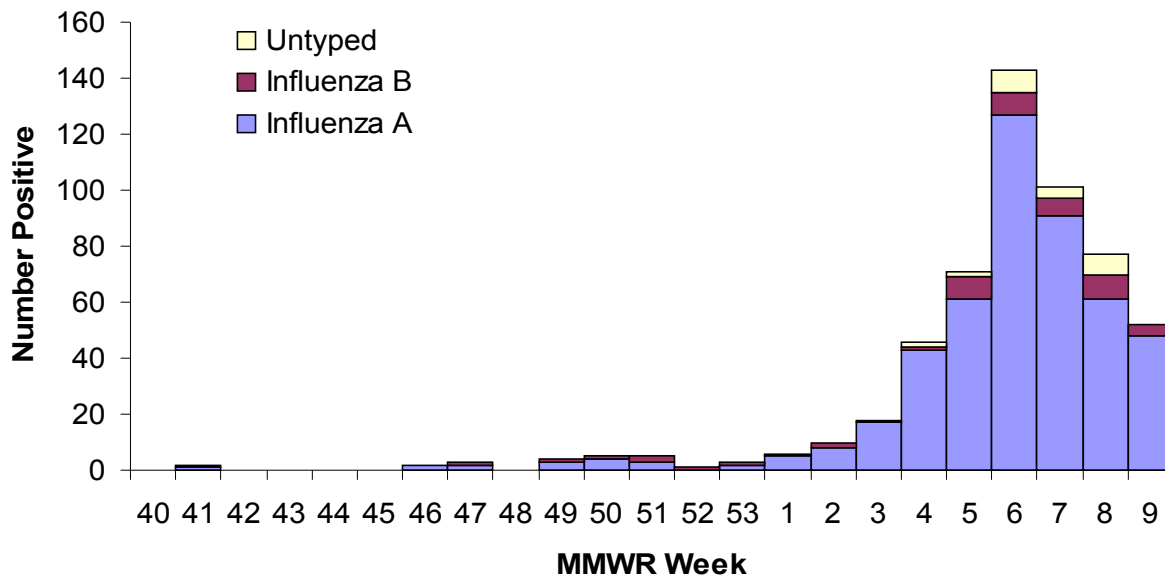
Respiratory Specimens Positive for Influenza from Two Reference Laboratories, Maine, 2008 - 2009



Rapid tests are often used in clinical practice and these results contribute to the determination of the state influenza activity code reported to the federal CDC. Many hospitals, laboratories, and physicians offices report these test results to the state. There is the possibility of duplication of results from reference labs and the rapid report called into the state. However, since influenza is not required to be reported, it is still assumed that these numbers are an underrepresentation of the true burden of influenza.

During the week ending March 7th, 2009, 52 samples tested positive using rapid testing, 48 for influenza A, and four for influenza B. A combined total of 549 positive rapid tests have been reported this season. 478 were positive for influenza A, 47 were positive for influenza B, and 24 were not typed.

Positive Rapid Influenza Tests, Maine, 2008-2009



Outbreaks

During the week ending March 7th, 2009, four outbreaks of influenza-like illness were reported, all in long term care facilities. One outbreak was in the Western district, one in the Central district, and two in Aroostook district. All four outbreaks were confirmed as influenza A. To date, 30 outbreaks of influenza-like illness have been reported; 16 in long term care facilities and 14 in schools.

Influenza-like illness outbreaks by selected characteristics – Maine, 2008-09

	Facility Type*	District	Date Reported	Attack Rate (%)		Hospitalizations #	Deaths #	Vaccination rate (%)		Lab-confirmed
				Resident	Staff			Resident	Staff	
1	LTC	Cumberland	11/21/2008	6	1	0	0	100	68	No
2	LTC	Mid Coast	1/22/2009	4	0	2	0	96	50	Influenza A
3	LTC	Western	1/26/2009	2	0	1	0	99	50	Influenza A
4	LTC	Cumberland	1/30/2009	2	0	1	0	96	64	Influenza A
5	School	York	2/2/2009	34	^	^	^	^	^	Influenza A
6	School	Penquis	2/4/2009	1	0	1	^	^	^	Influenza A
7	School	Mid Coast	2/9/2009	26	13	^	^	^	^	No
8	School	Mid Coast	2/9/2009	27	14	^	^	^	^	No
9	School	York	2/10/2009	^	^	^	^	^	^	^
10	LTC	York	2/10/2009	3	^	^	^	^	^	Influenza A
11	School	Downeast	2/10/2009	4	^	^	^	^	^	Influenza A
12	School	Mid Coast	2/10/2009	19	0	^	^	^	^	Influenza A & B

13	School	Mid Coast	2/2/2009	23	5	^	^	^	^	Influenza A
14	LTC	Mid Coast	2/10/2009	5	^	^	^	^	^	Influenza A
15	School	Mid Coast	2/10/2009	46	4	^	^	^	^	Influenza A
16	School	York	2/11/2009	15	15	^	^	^	^	^
17	School	York	2/11/2009	15	^	^	^	^	^	Influenza B
18	School	Western	2/13/2009	39	^	^	^	^	^	Influenza A
19	LTC	Mid Coast	2/17/2009	14	24	0	2	96	20	Influenza A
20	LTC	Western	2/19/2009	2	0	0	0	^	^	Influenza A
21	School	Central	2/23/2009	2	^	^	^	^	^	Influenza A & B
22	LTC	Western	2/23/2009	4	^	^	^	^	^	Influenza A
23	School	Western	2/25/2009	15	5	^	^	^	^	Influenza B
24	LTC	Western	2/25/2009	8	^	^	^	^	^	Influenza A
25	LTC	Central	2/26/2009	26	^	^	^	100	^	Influenza B
26	LTC	Cumberland	2/26/2009	2	0	1	0	96	46	Influenza A
27	LTC	Central	3/3/2009	53	^	3	^	93	^	Influenza A
28	LTC	Aroostook	3/3/2009	17	^	^	^	^	^	Influenza A
29	LTC	Aroostook	3/3/2009	13	^	^	^	^	^	Influenza A
30	LTC	Western	3/6/2009							Influenza A

* Outbreak definition is specific to facility type. An outbreak in long-term care facilities (LTC) is defined as ≥ 3 patients with ILI identified on same floor or ward during a short (e.g., 48-72 hour) period OR ≥ 1 patients with lab-confirmed influenza; an outbreak in an acute care facility (ACF) is defined as ≥ 1 patients with ILI or lab-confirmed influenza with symptom onset ≥ 48 hours post-admission (i.e., nosocomial); and an outbreak in a school is defined as $\geq 15\%$ absentee rate among student population due to ILI or lab-confirmed influenza.

^ Data unavailable

NA indicates not applicable

**Maine DHHS Districts:

York District: York county

Cumberland District: Cumberland county

Western District: Franklin, Oxford, and Androscoggin counties

Mid Coast District: Waldo, Knox, Lincoln and Sagadahoc counties

Central District: Somerset and Kennebec counties

Penquis District: Piscataquis and Penobscot counties

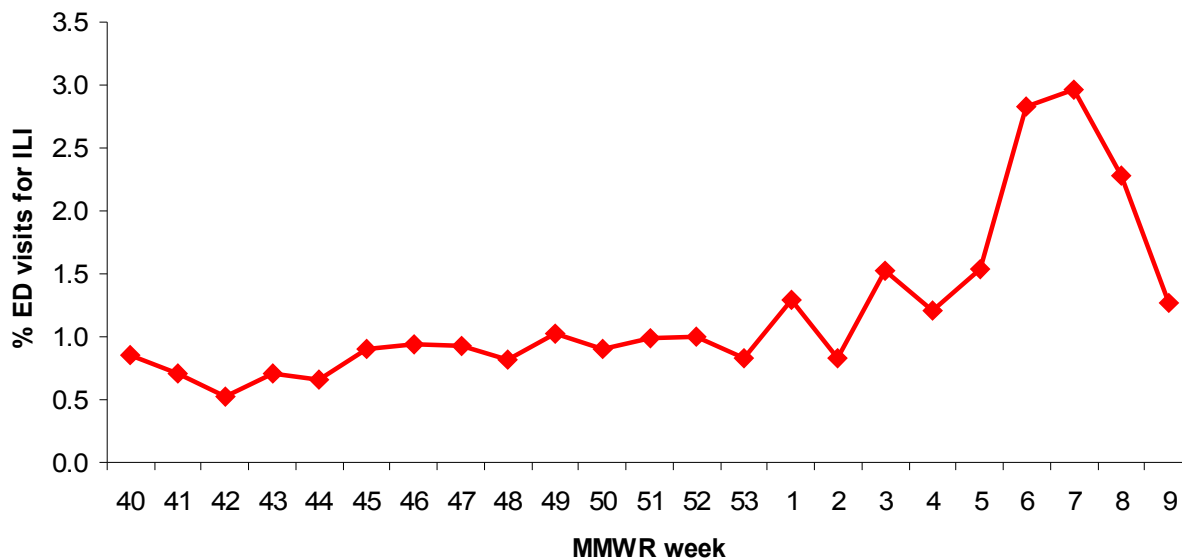
Downeast District: Washington and Hancock counties

Aroostook District: Aroostook county

Syndromic Surveillance

1.8% of visits to emergency departments at seven of Maine's hospitals were characterized as influenza-like illness during week 9, based on the patients' chief complaint.

Emergency Department Visits for ILI at Seven Hospitals – Maine, 2008-09

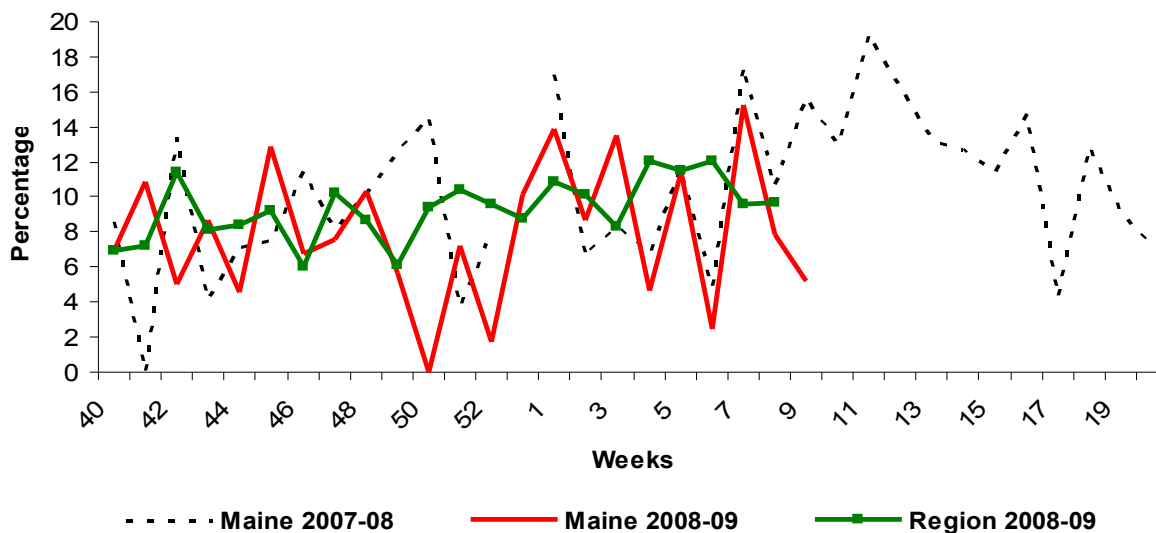


Fatalities Surveillance

Death Certificates

During the week ending March 7th, 2009, 5.2% of deaths reported by three city vital records offices were attributable to pneumonia and influenza.

Percentage of Deaths Attributable to Pneumonia and Influenza – Maine, 2007-09



Pediatric Fatalities

No influenza-associated pediatric deaths in Maine have been reported this season.

National Influenza Activity

State health departments report the estimated level of influenza activity in their states each week. States report influenza activity as: 1) no activity, 2) sporadic, 3) local, 4) regional, or 5) widespread (definitions of these levels can be found at: www.cdc.gov/flu/weekly/usmap.htm). Maine reported regional activity for the week ending March 7th, 2009 (week 9).

